

CLAIM AMENDMENTS

Pursuant to 37 CFR 1.121, a complete listing of all claims in the application, and their status, is set forth below. The text of each pending claim is also provided. Please amend the pending claims as follows, wherein added matter is underlined and deleted matter is ~~stricken through~~ or ~~[[double bracketed]]~~ in the text of the currently amended claims, relative to the immediate prior version. The claims in this listing are deemed to replace all prior claims in the application.

1. (Currently Amended) A weighing scale apparatus comprising:
 - (a) a base for contacting a support surface;
 - (b) a platform for contact with a load, the platform disposed above ~~and in operational contact with~~ the base, the platform having a predetermined number of load cell mounts, each one of the load cell mounts providing a deflection gap between a load cell and the platform;
 - (c) a load cell protection case connected below each load cell mount, each load cell case having a load cell enclosure with an open bottom;
 - ~~(((c))~~ d) a number of single ended, shear beam load cells equal to the number of load cell mounts, each one of the load cells being ~~attached to one of the load cell mounts of the platform and being positioned between the base and the platform~~ disposed in the load cell enclosure of a load cell case, each load cell having a body of a predetermined length with a first end connected to the platform and a second end extending therefrom; and
 - ~~(((d))~~ e) an a number of engagement member~~[[s]]~~ equal to the number of connected to the second end of each load cell~~[[s]]~~, each one of the engagement members being in operational contact with the base ~~and one of the load cells,~~ each engagement member including a foot disposed on the top surface

of the base and having a vertically disposed threaded aperture, and a threaded engagement fastener of a predetermined length, the engagement fastener bottom end being threadedly disposed in the foot aperture and the engagement fastener top end being threadedly disposed in the second end of the load cell.

2. (Original) The weighing scale apparatus of claim 1 wherein, the base comprises opposed linear angle foot members at opposite ends of the platform.
3. (Original) The weighing scale apparatus of claim 1 wherein, each one of the load cell mounts has at least one support position upon which one of the load cells is attached.
4. (Original) The weighing scale apparatus of claim 1, further including an electrical control/display and a power supply, the electrical control/display in communication and remote from the weighing scale, the power supply being located in the electrical control/display.
5. (Original) The weighing scale apparatus of claim 1, further including a summing box for summing output from the predetermined number of load cells.
6. (Original) The weighing scale apparatus of claim 5 wherein, the summing box is in communication with an electrical control/display.
7. (Original) The weighing scale apparatus of claim 5 wherein, the summing box is mounted to the platform of the weighing scale apparatus.

8. (Original) The weighing scale apparatus of claim 1 wherein, the predetermined number of load cells mounts, load cells and engagement members is at least four.
9. (Original) The weighing scale apparatus of claim 1 wherein, the predetermined number of load cell mounts, load cells and engagement members is four with each load cell secured adjacent a corner of the platform.
10. Canceled.
11. (Currently Amended) The weighing scale apparatus of claim ~~[[10]]~~ 1 wherein~~[[,]]~~ the foot includes a foot member secures the securing a foot nut to a surface of the base.
12. Canceled.
13. Canceled
14. (Original) The weighing scale apparatus of claim 1, further including a pair of opposed access ramps, each ramp secured to the base at opposed ends of the weighing scale apparatus.
15. (Original) The weighing scale apparatus of claim 1 wherein, the platform comprises a planar, bundle of rectangular tube members secured between a top contact surface plate and a bottom surface plate.

16. (Currently Amended) A weighing scale assembly comprising:

(a) at least two weighing scale units, each weighing scale unit including;

(i) ~~[[a]]~~ a pair of L-shaped bases for contacting a support surface, each base including a horizontal bottom leg for contacting the support surface and a vertical top leg extending upwardly from the bottom leg;

(ii) a platform for contact with a load, the platform having four corners, the platform disposed above and in operational contact with the base, the platform having a predetermined number of four load cell mounts, each one of the load cell mounts disposed proximate a corner of the platform and providing a deflection gap between a load cell and the platform, each load cell mount having a pair of mounting apertures and an access aperture;

(iii) four load cell cases, each disposed below a load cell mount, each load cell case having a top member which abuts the load cell mount and a continuous side member extending downwardly from the periphery of the top member to define a load cell enclosure with an open bottom, the top member having a pass through apertures aligned with the mounting apertures and adjustment access aperture of the platform;

~~[[(iii)]]~~ (iv) a number of four single ended, shear beam load cells equal to the number of load cell mounts, each one of the load cells being attached to one of the load cell mounts of the platform and being positioned between the base and the platform disposed in the load cell enclosure of a load cell case, each load cell having a body of a

predetermined length with a first end and second end disposed toward the platform corner, and a pair of mounting apertures disposed toward the first end and aligned with the mounting apertures of the platform, and a threaded fastening aperture disposed toward the second end and aligned with the adjustment access aperture of the platform, each load cell being fastened to the platform at its first end by a pair of threaded fasteners disposed through the mounting apertures, the pass through apertures of the case, and the mounting apertures of the platform, each fastener threaded bottom end extending below the load cell body and having a threaded nut attached thereto; and

(iv) a number of four engagement members equal to the number of load cells, each one of the engagement members being in operational contact with the base and one of the load cells, each engagement member including a foot nut disposed on the top surface of the base bottom leg and having a vertically disposed threaded aperture, a foot member fastening the foot nut to the bottom leg, and a threaded engagement fastener of a predetermined length, the engagement fastener bottom end being threadedly disposed in the foot nut aperture and the engagement fastener top end being threadedly disposed in the fastening aperture of the load cell; and

whereby, in use, a load applied to the platform is directed to the first end of each load cell in cooperation with the second end of each load cell being supported by the respective engagement members, and the

protection of the load cells by the respective load cell cases, optimizing

load sensing deflection of the single ended shear beam load cells ; and

(b) an electrical control/display and a power supply operatively connected to the at least two weighing scale units for displaying the total weight supported by the scale assembly.

17. Canceled.

18. Canceled.

19. (Original) The weighing scale assembly of claim 16, further including a summing box for each scale unit, the boxes summing output from the predetermined number of load cells of each scale unit.

20. (Original) The weighing scale assembly of claim 19 wherein, the summing boxes are in communication with the electrical control/display.

21. (Original) The weighing scale assembly of claim 19 wherein, the summing box is mounted to the platform of the weighing scale unit.

22. Canceled.

23. (Original) The weighing scale assembly of claim 16 wherein, the at least two weighing scale units are operatively connected in series to the electrical control/display and the power supply, the power

supply being located in the electrical control/display, and the electrical control/display being remote from the weighing scale units.

24. Canceled.

25. Canceled.

26. Canceled.

27. Canceled.

28. (Original) The weighing scale assembly of claim 16, further including at least two pair of opposed access ramps, each ramp secured to the base at opposed ends of each of the at least two weighing scale units.

29. (Original) The weighing scale assembly of claim 16 wherein, the platform comprises a planar, bundle of rectangular tube members secured between a top contact surface plate and a bottom surface plate.

30. (Currently Amended) A vehicle weighing scale assembly comprising:

(a) ~~two~~ a pair of side-by-side weighing scale units separated a predetermined distance from each other corresponding to the track or wheel width of a vehicle to be weighed, each weighing scale unit including front and rear tandem scales, each scale including[[;]]:

(i) [[a]] a pair of L-shaped bases of a predetermined length for contacting a support surface, each base including a horizontal bottom leg for contacting the support surface and a vertical top leg extending upwardly from the bottom leg;

(ii) a rectangular platform for contact with a load, the platform having front and rear ends and left and right sides defining a predetermined platform width equivalent to the length of the bases and a predetermined platform length which forms a vehicle travel path and which is greater than the platform width, the platform further having four corners, the platform disposed above and in operational contact with the base, the platform having a predetermined number of four load cell mounts, each one of the load cell mounts disposed proximate a corner of the platform and providing a deflection gap between a load cell and the platform, each load cell mount having a pair of mounting apertures and an access aperture;

(iii) four load cell cases, each disposed below a load cell mount, each load cell case having a top member which abuts the load cell mount and a continuous side member extending downwardly from the periphery of the top member to define a load cell enclosure with an open bottom, the top member having a pass through apertures aligned with the mounting apertures and adjustment access aperture of the platform;

[[(iii)]] (iv) a number of four single ended, shear beam load cells equal to the number of load cell mounts, each one of the load cells

~~being attached to one of the load cell mounts of the platform and being~~
~~positioned between the base and the platform~~ disposed in the load cell
enclosure of a load cell case, each load cell having a body of a
predetermined length with a first end and second end, the body being
disposed longitudinally with respect to the lengthwise travel path of the
platform and the second end being disposed toward the platform corner,
and a pair of mounting apertures disposed toward the first end and aligned
with the mounting apertures of the platform, and a threaded fastening
aperture disposed toward the second end and aligned with the adjustment
access aperture of the platform, each load cell being fastened to the
platform at its first end by a pair of threaded fasteners disposed through the
mounting apertures, the pass through apertures of the case, and the
mounting apertures of the platform, each fastener threaded bottom end
extending below the load cell body and having a threaded nut attached
thereto; and

(iv) ~~a number of four~~ engagement members ~~equal to the number~~
~~of load cells,~~ each one of the engagement members being in operational
contact with the base and one of the load cells, each engagement member
including a foot nut disposed on the top surface of the base bottom leg
and having a vertically disposed threaded aperture, a foot member
fastening the foot nut to the bottom leg, and a threaded engagement
fastener of a predetermined length, the engagement fastener bottom end
being threadedly disposed in the foot nut aperture and the engagement

fastener top end being threadedly disposed in the fastening aperture of the load cell, the engagement fastener having a length sufficient to elevate the load cell, load cell case and platform off of the ground a predetermined distance for placement of lift fork for lifting;

whereby, in use, a load applied to the platform is directed to the first end of each load cell in cooperation with the second end of each load cell being supported by the respective engagement members, and the protection of the load cells by the respective load cell cases, optimizing load sensing deflection of the single ended shear beam load cells; and

(b) each weighing scale unit further including:

- (i) a base connector disposed between the rear end of the front scale and the front end of the rear scale and attaching the scales in tandem; and
- (ii) an entry ramp connected to the front end of the front scale and an exit ramp connected to the rear end of the rear scale;

(c) an electrical control/display and a power supply operatively connected to the two pairs of weighing scale units for displaying the total weight supported by the scale assembly.

31. Canceled.

32. Canceled.

33. (Original) The weighing scale assembly of claim 30 wherein, the base comprises a connector portion positioned between a pair of platform members and connected thereto, and opposed linear angle foot members secured at opposite ends of the pair of platform members.

34. (Original) The weighing scale assembly of claim 33, further including a pair of opposed access ramps, each ramp secured to the base at opposed ends of the pair of weighing scale units.

35. Canceled.

36. Canceled.

37. Canceled.

38. Canceled.

39. (Currently Amended) A method of weighing an axle of a vehicle comprising the steps of:

(A) providing a weighing scale assembly comprising;

(i) a pair of weighing scale units, each unit including;

(a) a base for contacting a support surface;

(b) a platform for contact with a load, the platform disposed

above ~~and in operational contact with~~ the base, the platform having a

predetermined number of load cell mounts, each one of the load cell

mounts providing a deflection gap between a load cell and the platform;

(c) a load cell case connected below each load cell mount, each load cell case having a top member which abuts the load cell mount and a continuous side member extending downwardly from the periphery of the top member to define a load cell enclosure with an open bottom;

(~~[[c]]~~ d) a number of single ended, shear beam load cells equal to the number of load cell mounts, each one of the load cells being ~~attached to one of the load cell mounts of the platform and being positioned between the base and the platform~~ disposed in the load cell enclosure of a load cell case, each load cell having a body of a predetermined length with a first end connected to the platform and a second end extending therefrom; and

(~~[[d]]~~ e) ~~an a number of~~ engagement member~~[[s]] equal to the number of~~ connected to the second end of each load cell~~[[s]], each one of the engagement members being in operational contact with the base and one of the load cells, each engagement member including a foot disposed on the top surface of the base and having a vertically disposed threaded aperture, and a threaded engagement fastener of a predetermined length, the engagement fastener bottom end being threadedly disposed in the foot aperture and the engagement fastener top end being threadedly disposed in the second end of the load cell.~~

(B) positioning each scale unit of the weighing scale assembly on a support surface;

(C) moving an axled vehicle onto the scale assembly such that each scale unit supports one end of an axle thereof; and

(D) observing the output of the electrical display.